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## **Predictors of attitudes and turnover intentions in people with disabilities: The importance of means-efficacy**

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PREDICTORS OF ATTITUDES AND TURNOVER INTENTIONS  
IN PEOPLE WITH DISABILITIES: THE  
IMPORTANCE OF MEANS-EFFICACY

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Psychology:  
Industrial/Organizational

---

by  
Naomi Charity Schmierer

December 2005

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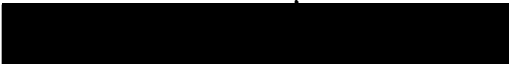
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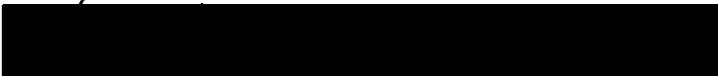
by  
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December 2005

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## ABSTRACT

Despite the legislative efforts of the Rehabilitation Act of 1973 and Americans with Disabilities Act of 1990, the employment rate for people with disabilities is a low 37.5% compared to 77.8% for those without disabilities (Houtenville, 2005). Research found job satisfaction and job loss to be a critical employment issue facing people with disabilities. Previous literature has pinpointed several individual, job, and organizational characteristics as significant predictors of workplace attitudes and turnover cognitions. This study seeks to augment the existing literature by examining the importance of means-efficacy, an individual's perception of their organizational resources (Eden, 1996 & Agars, Kottke, & Unckless, 2005). In the process of identifying these predictors, researchers have overlooked the importance of one's reasonable accommodations. Because reasonable accommodations are legally mandated organizational resources, it is possible that the perception of these resources may be crucial when examining workplace attitudes and turnover cognitions in people with disabilities.

This study surveyed 107 working college students with varying disabilities. Individual, job and organizational characteristics were evaluated for their ability to predict job satisfaction, organizational commitment, and turnover cognitions. Using hierarchal regression this study found that self-efficacy, job characteristics, and means-efficacy were key predictors of job satisfaction, while job characteristics and means-efficacy were predictors of organizational commitment. Means-efficacy however was the only predictor of turnover intentions. This study was able to advance the understanding of disability issues relating to workplace motivation. Having implications to management and placement programs, this study demonstrated that means-efficacy is important to people with disabilities and is relevant to both disability and organizational research.

## ACKNOWLEDGEMENTS

I would like to acknowledge my advisor Dr. Mark Agars for without his patience, dedication, and resourcefulness; I would not have finished this project. Also, I would like to acknowledge my committee members Dr. Jan Kottke and Dr. Joanna Worthley for their expertise and dedication to the scientific method. Lastly, I would like to acknowledge the WorkAbility IV program, which initiated the idea for my thesis.

## DEDICATION

I would like to dedicate the completion of this thesis to dad, Gary, whom I wouldn't have gotten this far without his sacrifices. I would like to thank my brother Daniel who spent countless hours in trying to get my survey to be web friendly; my other family members mother Beth, mother Mary, Max, Joey, Josh, and Virginia who gave a listening ear to my worries and challenges. I would also like to thank "the girls," Beth and Connie, who would never let me give up. Lastly, I thank all the staff of WorkAbility IV, Amanda Spivey, Ruth M. Howell, and Larry Cummins, for all their support and patience.

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## CHAPTER ONE

### THE IMPORTANCE OF MEANS-EFFICACY

Imagine you have back problems and you need a special therapeutic chair in order to do your job. Would you expect your boss or organization to purchase this chair? What if the chair they provided kept breaking? How long would you stay at that organization? There are over 54 million Americans with disabilities, and the Department of Labor found that of 7.5 million people with disabilities, 80% of them want to work, but do not (Department of Labor, 1999). The high unemployment rate for people with disabilities has been on the forefront of legal concern for decades.

Prior to the 1970s, discrimination was seen as a major cause for low employment in people with disabilities. Thus began the onslaught of legislation designed to remedy the problem. In 1973, The Rehabilitation Act prohibited those companies holding government contracts from discriminating against those with disabilities. However, discrimination in private industry still occurred (Bowman, 1987; Kennedy, 1993). For instance Bowman found that employers perceived individuals

as less competent to perform the essential job functions as the severity of the disability increased. This prompted the most important civil rights law since the Civil Rights Act of 1964, The American with Disabilities Act.

In 1990, President George H.W. Bush signed the Americans with Disabilities Act (ADA). The ADA prohibits discrimination against peoples with disabilities at any level of the employment process including application, selection, compensation, career development, and training (Department of Justice, 2002). The ADA goes further in that it also mandates the provision of reasonable accommodations for employees who can perform the essential functions of the job. Despite the legislation, the unemployment problem for people with disabilities remained. One study found that, of 2,500 rehabilitated clients, 25% were no longer working after 3 months and 50% were no longer working after a year (Gibbs, 1990). Consequently, more legislation resulted.

President Clinton signed the Workforce Investment Act of 1998 (WIA, and the Ticket to Work and Work Incentives Improvement Act of 1999 (TWWIIA). The WIA was designed to assist those with disabilities to locate the necessary tools in order to manage their career development and to

provide organizations the necessary information in order to hire the right person for the job. The TWWIIA allows those receiving Medicare or Medicaid to keep their benefits while working (Department of Labor, 2002).

A governmental survey found that organizations are taking a more proactive approach in hiring people with disabilities (Bruyere, 2000). Despite the efforts organizations are making to provide reasonable accommodation to people with disabilities, a recent survey found that 55% of people with disabilities with college degrees are not working compared to 14% of the non-disabled population with college degrees not working (Harris Interactive Inc., 2000).

Acknowledging the limited effectiveness of the prior legislation, President George W. Bush attempted to renew the country's dedication to disability awareness by establishing the New Freedom Initiative in 2001 (Department of Labor, 2002). The New Freedom Initiative act was designed to give people with disabilities more opportunities in the areas of employment, assistive technology, education, and community life. For example, among the President's goals are integration of Americans with Disabilities into the workplace by promoting

telecommuting, implementing the Ticket to Work Program, understanding and use of tax incentives for the disabled, using the federal government as a model employer, and removing disincentives to work. However, even with all the legislative efforts, the employment discrepancies between the non-disabled and disabled remain a concern for researchers and practitioners.

A 2003 California Health and Work Survey compared work issues between the disabled and the non-disabled population for the periods of 1998-2000 (Yelin, 2003). Yelin found that people with disabilities experienced different employment conditions than their non-disabled counterparts. Specifically, 17.5% of people with disabilities reported not having a job after a year of employment compared with 9.1% who are not disabled. It was determined that disability was the key factor rather than individual characteristics such as race, sex, and marital status for the low employment and high job loss. Yelin found that even in a strong economy, people with disabilities reported lower employment rates and higher job loss than those without disabilities.

Consistent with Yelin's findings, other studies show that even in a strong economy people with disabilities do

not always benefit (Burkhauser, Daly, & Hountenville, 2002). The Federal Reserve reported that hourly compensation rose 3.5% in January 2005. In addition, the unemployment rate slightly decreased from 5.5% in 2004 to 5.25%(Federal Reserve Bulletin, 2005). Despite the slight improvement, the disability community may not share the enthusiasm (Burkhauser, Daly, & Hountenville, 2002).

Burkhauser et al. discovered that while many Americans were benefiting from the economic boom after the recession of 1990, people with disabilities did not. In fact, their employment income continued to decline even after the recession. On a more local level, The Cornell Employment and Disability Institute found that in California the prevalence of working age (21-64) people with disabilities has decreased slightly since 2003, 10.7% to 10.5% in 2004 (Hountenville, 2005). Also, 75.3% of the working age non-disabled population is employed compared to 38.3% of working age disabled.

#### Turnover and Turnover Related Outcomes

It is evident that job retention/turnover is an important factor when looking at the employment problem facing people with disabilities. When examining turnover



in people with disabilities, decades of research suggests that job satisfaction is the first step to turnover behaviors such as absenteeism, turnover intentions, and actual turnover (Geyer, & Schroedel, 1998; & Witte, Phillips, & Kakela, 1998; Roessler, 2004).) In fact, job satisfaction, the extent to which an individual likes his or her job (Hirschfeld, 2000) is perhaps the most frequently measured workplace outcome variable in both the disabled and non-disabled research.

The disability related literature found that job satisfaction predicted turnover in people with disabilities, which is consistent with the research done among non-disabled populations (Geyer, & Schroedel, 1998; & Witte, Phillips, & Kakela, 1998). Geyer & Schroedel found a negative relationship between job satisfaction and job search behavior people who are deaf or hard of hearing (Geyer & Schroedel, 1998). This research also suggests that people with disabilities are more prone to being dissatisfied with their jobs than those without disabilities. Witte et al. concluded that college graduates with learning disabilities experienced more job dissatisfaction than their non-disabled counterparts (1998).

To date, organizational commitment, the degree to which an individual identifies with the organization (Porter, et al, 1974), has not been an outcome measured in disability literature; rather, the majority of the research focuses on job satisfaction. However, the non-disability research claims that organizational commitment is a significant predictor of turnover (Porter, Steer, & Mowday, 1974; Allen & Meyer, 1990; Hom & Kinicki, 2001). Organizational commitment comprises three factors of influence: belief and acceptance in the organization's goals, committed effort on behalf of the organization, and the desire to remain with the organization (Meyer & Allen, 1990). Recognizing the importance of job attitudes and turnover cognitions, the disability research began identifying predictors of job satisfaction and turnover intentions.

#### Predictors of Attitudes and Turnover Intentions

The disability research provides support for the importance of individual, job, and organizational characteristics as influencing workplace attitudes and turnover cognitions (Nisbet & York, 1989, Geyer &

Schroeder, 1998; Witte et al, 1998 & Crudden, 2002). Much of the relevant literature examining workplace issues among people with disabilities is limited. First, most of the research is qualitative, using case studies or having small sample sizes. Second, of the few quantitative studies, most have limited generalizability in that the sample represents a single disability, deaf and hard of hearing. Last, there is no relevant research done examining organizational commitment in people with disabilities.

#### Individual Characteristics

From the start, the disability literature has supported the importance of individual characteristics as being crucial to work related outcomes (Hershenson, 1981; Conte, 1983; Petrovski & Gleeson, 1997). In fact the literature states that characteristics such as self-concept, perception of disability, family support, income, and physical health are more influential than job or organizational characteristics such as complexity of the job and co-worker support (Petrovski & Gleeson, 1997 & Crudden 2002).

Early on, the research focused on examining the relationship between one's disability, self-concept,

physical health, and workplace motivation (Hershenson, 1981 & Conte, 1984). Later, the research began to identify which individual characteristics were the best predictors (Geyer & Schroedel, 1998).

Theorists found that self-concept, individuals's general perception of themselves, along with one's perception of disability and family support each influence workplace motivation and performance (Hershenson, 1981 & Conte, 1983). Hershenson concluded that reduced motivation inhibits the individual from developing and/or maintaining work skills and habits. Finding that a negative perception of one's disability decreases workplace motivation, the focus of vocational rehabilitation literature became identifying influences on self-perceptions.

Researchers began to focus on individual's perceptions' of their disability when their disability occurred mid-career. Hershenson's goal was to establish a theoretical model that would generalize across employment situations and disabled populations (Hershenson, 1981 & Hershenson, 1998). By integrating the consideration of environmental factors, decision-making abilities, and self-concept, Hershenson provided additional insight into successful work adjustment for people with disabilities.

Both Hershenson (1981) and Conte established the importance of self-efficacy and self-concept as indicators of job satisfaction in people with disabilities. As a result, rehabilitation counseling concentrated on maintaining and developing self-efficacy in their clients.

Building on this literature, the research studied how characteristics such as family support, self-concept, and work environment were connected to job satisfaction and turnover cognitions. In efforts to understand career development in people with disabilities, one study looked at sources of motivation for career development in Hispanics with physical disabilities (Trevino & Szymanski, 1996). The authors found that family support, home environment, work values, and desire for self-sufficiency were key sources of motivation. The authors also found an interactive relationship between socio-economic class, work personality, and self-efficacy. Specifically, the impact of one's disability was more influential for those with less income and education. Participants reported that a good working environment was a necessity for career development, and a major barrier to career development was the lack of knowledge or access to the necessary support and/or resources. This study

provided insight into the importance of individual characteristics together with job characteristics and organizational resources influences on job satisfaction among those with disabilities.

In more recent literature, researchers began evaluating the influence of self-esteem, social stigma, loneliness, and aspirations on job satisfaction and psychological health in people with developmental disabilities. One study found a significant relationship between social stigma, loneliness and job satisfaction (Petrovski & Gleeson, 1997). Those individuals who felt more stigmatized and experienced more loneliness were less satisfied with their jobs. Interestingly, the desire to fit in, to find a more interesting job, and to find a more challenging job influenced job satisfaction more than self-esteem and personal aspirations. A meta analysis compiling and reviewing 35 articles concluded that past employment behavior, family relationships, cognitive functioning, and substance abuse were common predictors of job satisfaction, turnover intentions, and organizational commitment in people with severe to moderate mental illness (Tsang, Lam, Ng, & Leung, 2000). Overall, the literature has provided strong evidence for the importance

of individual characteristics including self-concept as critical to job satisfaction and turnover cognitions in individuals with disabilities.

### Job and Organizational Characteristics

Realizing that individual characteristics alone are not the only indicators of turnover cognitions in individuals with disabilities, researchers began to examine the extent to which job and organizational characteristics influence job satisfaction (Test, Hinson, Solow, & Keul, 1993). Using a modified version of the Minnesota Satisfaction Questionnaire, one study looked at six individuals with moderate to severe disabilities and concluded that along with individual characteristics such as desire to work and work experience, specific task skills were also significant indicators of job satisfaction (Nisbet & York, 1989). Despite the small sample size, this study provided evidence as to the influence of job characteristics on job satisfaction for those receiving community assisted living.

Another study found that individuals with developmental disabilities reported higher job satisfaction in a supported employment environment (Test et al., 1993). Individuals who received job coaching and

workstations services conveyed higher job satisfaction than those who were unable to receive these services. In addition, another study reported unfair company practices as significant predictors of low job satisfaction for disabled people placed in a special training program (Hauser & Chace, 1993).

Witte et al. (1998) found that college graduates with learning disabilities were more dissatisfied with their present job than their non-disabled counterparts. The participants perceived themselves as having fewer opportunities for promotion, less pay, ineffective supervision, and superficial co-worker relationships. Each of these factors led to a decrease in job satisfaction. For deaf and hard of hearing worker, availability of accommodations and higher pay were the key factors leading to job search behavior (Geyer & Schroedel, 1998).

One case study reported several external factors influencing job tenure in a woman with multiple sclerosis (Roessler, 2002). The woman stated that being left out of the decision processes at work, having her disability aggravated by the working environment, and the quality of her accommodations contributed to her decision to leave the organization. Being one of the first studies to



acknowledge the importance of accommodations in turnover cognitions, this study lends support for the continued examination of how perceptions of the quality of one's accommodations impact attitudes and turnover cognitions in people with disabilities. Harlan and Robert (1998) interviewed disabled workers from several different organizations and found that organizational characteristics including, supervisor support, organizational hierarchy, and the length of time were the major barriers in receiving their accommodations.

Another case study of ten individuals examined job retention in individuals who lost their vision or became legally blind in later life (Crudden, 2002). Crudden found that personal characteristics such as personality and family support were key in influencing job retention. Job characteristics, such as job re-design, along with organizational characteristics such as computer technology and access to materials also influenced job retention. The author did not expect computer technology and print access to be singled out as characteristics impacting the individuals' decision to leave their jobs. Even though much of the research used small sample sizes, the work taken together suggests that characteristics other than

individual and job characteristics influence job retention and job satisfaction among people with disabilities.

Although the empirical literature examining outcomes such as organizational commitment and turnover intentions in people with disabilities is limited, additional support for examining these outcomes comes from the mainstream literature.

In a review of predictors of organizational commitment in public organizations, Balfour and Wechsler found that job tenure, education, and position in the company directly predicted organizational commitment (1996). However, a study examining job satisfaction in federal government employees concluded that gender, interest in serving the public, and education were not related to job satisfaction, while promotional opportunity, race, and age were indirectly related (Ting, 1997). Those in lower positions in the company reported more job satisfaction. Still, another study looking at antecedents to job retention and turnover in the human service industry found that locus of control, gender, general life satisfaction, education, income, and job tenure were not strong predictors of intentions to leave or turnover (Mor Barak, Nissly, & Levin, 2001). However,

this study did demonstrate that age, work experience and work competences were significant predictors of intentions to leave. Those who were younger, less experienced, and less competent reported high intentions to leave. As evidenced by this research, individual characteristics are somewhat inconsistent in predicting job attitudes in the non-disabled population.

Conversely, both job and organizational characteristics have been consistently supported as strong predictors of attitudes and turnover cognitions (Hackman & Oldham, 1975; & Finlay, Martin, Roman, & Blum, 1995; Spector, 2000). Hackman and Oldham's job characteristic theory has been widely accepted as the main theory explaining how the characteristics of a job relate to workplace performance, motivation, and absenteeism (Spector, 2000). Hackman and Oldham stated that people who held jobs that were enriching, complex, and essential would view work as more satisfying (Hackman & Oldham, 1975). Ultimately, these employees would be highly motivated, perform better, and engage less in turnover related behaviors such as frequent absenteeism.

Job characteristic theory states that five core characteristics, skill variety, task identify, task

significance, autonomy, and feedback generate three critical psychological states, which predict job satisfaction, job performance, work motivation, and attendance (Hackman & Oldham, 1976). Skill variety, task identity, and task significance lead to the critical psychological state, experienced meaningfulness. Autonomy leads to experienced knowledge, and feedback leads to knowledge of results.

The Job Diagnostic Survey (JDS) is the tool designed to measure the level of the five core characteristics. The scores from the JDS can be combined into a single indicator of motivating potential score (MPS). The MPS indicates the degree to which job characteristics influence workplace attitudes. The following formula is used (Hackman & Oldham, 1975):

$$\text{Motivating Potential Score} = (\text{SV} + \text{TS} + \text{TI}) / 3 \times \text{Autonomy} \times \text{Feedback}$$

Due to the multiplicative nature of the formula, it is posited that if a job lacks any one of the core characteristics, one's MPS is zero. Therefore the extent to which an individual perceives his or her job has having any of these core characteristics determines how motivating the job is likely to be.

In addition to the five core characteristics and critical psychological states, Hackman & Oldham (1975) acknowledges the importance of the moderator Growth Need Strength (GNS). GNS, the degree to which an individual strongly values and desires personal feelings of accomplishment and growth moderates the relationship between the core characteristics and psychological states and workplace outcomes. Specifically individuals who desire growth and accomplishment will respond better to jobs with a high MPS.

Organizational characteristics such as organizational structure, supervisor support, co-worker support, and organizational policies and procedures have also been linked to job satisfaction and organizational commitment (Finlay et al. 1995). For instance, Balfour (1996) was able to show that job and organizational characteristics are better predictors of organizational commitment than individual characteristics. After interviewing 19 public service employees, Balfour found supervisor support, participation, opportunity for advancement, task significance, and job scope were positively related to organizational commitment. Political interest was negatively related to organizational commitment,

indicating that those who exerted more political interest were more individually rather than organizationally driven. Along that same line, other studies show that organizational commitment, pay satisfaction, task clarity, skill utilization, relationships with supervisors, and relationships with co-workers were directly related to job satisfaction in state and federal governmental employees (Ting, 1997; Mor Barak, et al, 2001).

Some studies show an indirect relationship of organizational characteristics on job satisfaction and organizational commitment (Koberg, Boss, Senjem, Goodman, 1999). Evaluating job satisfaction and organizational commitment through perceived empowerment, Koberg et al. concluded that organizational characteristics such as length of stay with the organization, leader approachability, and worth of group, group effectiveness, and position in the organization's hierarchy contributed more to job satisfaction and organizational commitment than individual characteristics.

Hospitals and health care facilities provide great sample sizes from private industry, and much of the research examining organizational and job characteristics as predictors of work related outcomes comes from these

organizations (Price & Mueller, 1981 & George, Reed, Ballard, Collin, & Fielding, 1993). Examining organizational characteristics as indicators of moods in nurses who work with AIDS patients, a study found that both organizational and social support were positively related to general well being (George, et al, 1993). Organizational support was specified as perception of overall support, while social support indicated perceptions of coworker support.

Another study, looking at doctors' and nurses' perceptions of the hospitals internal and external environment, provided additional support for the importance of organizational characteristics predicting organizational commitment (Roy & Ghose, 1997). Both the nurses and doctors stated that they were more committed to the organization when they were made aware of the following, organization's goals, processes, strengths, competitors, and shareholder information.

It is clear from both the disability and non-disability research that much knowledge has been gained by observing the influences of individual, job, and organizational characteristics on attitudes and turnover cognitions. However, the research has neglected to examine

how an individual's perceptions of his or her accommodations influence workplace attitudes and turnover intentions. Accommodations represent a critical organizational characteristic. In fact, the Department of Labor found that one-third of unemployed people with disabilities indicated a need for some type of accommodation (1999).

Reasonable accommodations, such as assistive technology, adaptive equipment, and modified desks can be considered external resources needed to perform the job. For these reasons, examining the importance of means-efficacy, one's perception of the utility of his organizational resources (Eden, 1996 & Agars, Kottke, Unckless, 2005) may offer additional insight into the turnover problem for people with disabilities. Because the theory of means-efficacy is new to motivational research, other core motivational theories will be used to provide a theoretical background.

### Self and Means-Efficacy

Self-efficacy has been supported by decades of research as one's belief in his or her ability to succeed at a task (Bandura, 1977). Means-efficacy, having its



roots in the efficacy construct, refers to one's belief in the utility of his or her external resources (Eden, 1996). Both self-efficacy (Bandura, 1977; Gist, Schwoerer, & Benson, 1989) and means-efficacy (Eden, 1996) have been supported by motivational literature as being positively related to worker performance and other work related outcomes. Because self-efficacy has been empirically supported in the disciplines of social and organizational psychology, it provides a good theoretical framework for examining the concept of means-efficacy.

Self-efficacy has a broad application to the fields of counseling, sports psychology, education and organizational motivation. Self-efficacy is comprised of two sources, specific self-efficacy and general self-efficacy. Supporters of specific self-efficacy stated that self-efficacy is specific to situations such as quitting smoking or learning a new task (Locke, Frederick, & Bobko, 1984; Caplan, Vinokur, Price, & van Ryn, 1989; & Gist & Mitchell, 1992). Whereas supporters of general self-efficacy claim that self-efficacy is resistant to change, transcending situations.

One study observing self-efficacy in the context of job seeking and re-employment behavior found support for

specific efficacy (Caplan, Vinokur, Price, & van Ryn, 1989). Self-efficacy in this study was measured as job seeking efficacy, the perceived ability to pursue job leads, prepare resumes, and interview for jobs. The authors determined that those who reported higher job seeking efficacy became employed sooner than those who did not. This study also demonstrated the importance and effectiveness of increasing self-efficacy through training; after an intervention aimed at increasing self-efficacy and workplace morale, the participants reported more job seeking efficacy, job satisfaction, and higher motivation.

Examining the notion of general self-efficacy, several studies demonstrated that previous successes lend one to think he or she can succeed at other tasks (Sherer & Maddux, 1982; Eden, 1988). Research found that general self-efficacy significantly influenced job search activity and re-employment, and could also be increased through training (Eden & Aviram, 1993). Those with high general self-efficacy reported a higher likelihood of being re-employed after job loss. After training, those with low general self-efficacy increased their job search activity more than those with high general self-efficacy. Even

though this study did not specifically measure specific self-efficacy, Eden and Aviram were able to gather more support for the value of general Self-efficacy in the workplace.

Eden and Kinnar also discovered that general Self-efficacy moderated the relationship between self-efficacy and performance (1991). Even though specific self-efficacy had more impact on performance, in new situations, general self-efficacy determined performance better than specific efficacy. Current research supports both specific and general self-efficacy as equally valuable to workplace motivation (Eden & Kinnar, 1991 & Eden & Zuk, 1995).

Expanding upon the efficacy research, the literature found that external resources had a significant impact on performance and workplace motivation. For example, one study observed motivation by looking at how one's confidence in his or her commanding officer, team, self, tools and equipment related to combat morale (Gal, 1986). This study concluded that one's confidence in his or her team, weapons and commander significantly influenced combat morale. More specifically, one's weapons (tools and equipment) were second to the willingness to follow a

commander (supervisor) as the most important source of morale.

Understanding that self-efficacy only captured part of the efficacy construct, Eden began evaluating the significance of external sources of motivation on performance (Eden, 1996). According to Eden, both high self-efficacy and high means-efficacy are need for an individual to be properly motivated. For instance, a person may have high self-efficacy, believing he or she has the ability to do the job, but still not indicate sufficient motivation. Eden attributed the insufficient motivation to the perceived poor quality of the employee's external resources (means-efficacy). Because means-efficacy is theoretically linked to self-efficacy, this construct also has general and specific sources. The general sources of means-efficacy include the organization, technology (software), managerial leadership, and work groups. The specific sources of means-efficacy include internal services, tools (hardware), supervisory leadership, team on specific tasks, and ad hoc task forces (Eden, 1996).

Following the self-efficacy framework, means-efficacy initially examined the influence of specific means-

efficacy on performance. Eden and Granat-Flomin (2000) tested specific means-efficacy through the Pygmalion technique. The experimental group was told by their managers to expect a brand new computer, and the control group just received the new computers. Observing general self-efficacy, computer efficacy, and means-efficacy, it was concluded that means-efficacy in respect to the new computer rather than self-efficacy was responsible for the raised expectations and increased performance. This study also examined and found support for increasing means-efficacy through managerial training. Being the first to study the influence of means-efficacy in the workplace, Eden and Granat-Flomin were able to find empirical evidence for means-efficacy: Those who believe they can perform the task and believe that the resources are useful are more apt to perform better.

Eden and Grant-Flomin (2000) tested the notion of means-efficacy by only increasing means-efficacy rather than increasing both Self-efficacy and means-efficacy. As a result it was not possible to determine which had the more influence on performance. In a subsequent study, Eden and Sulimani, 2001 examined the impact of specific means-efficacy by increasing both self and means-efficacy

through a training program designed to increase performance in Israeli Gunnery cadets. The authors found that when increasing both self-efficacy and means-efficacy, means-efficacy rather than self-efficacy predicted performance. Even though the training was designed to increase both self-efficacy and means-efficacy, it was concluded that means-efficacy increased more than self-efficacy. Eden stated that these findings suggest that in jobs with more dependence on tools, means-efficacy has more impact on performance than self-efficacy.

Comparable to general self-efficacy, general means-efficacy is also believed to transcend across situations (Eden, 1996). Acknowledging the importance of general means-efficacy, a recent study began validating a General Means-Efficacy Scale (GMES) (Agars, Kottke, & Unckless, 2005). Using 381 cases from organizational workers and university students, the authors found construct validity for the GMES. Collective efficacy, group potency, resource adequacy were organizational characteristics used to establish convergent validity. Work locus of control and growth need strength, were individual characteristics used to establish discriminant validity. Not only did this

study demonstrate support for the unidimensional construct means-efficacy, but it also established strong support for eight dimensions of general means-efficacy (tools, time, information, performance feedback, training, social support, and supervisor support).

Several of the means-efficacy dimensions are supported by the disability literature as impacting motivation in people with disabilities (Harlan & Robert, 1998; Witte et al, 1998). For instance, one qualitative study analyzed the significance of supervisory support on delivery of accommodations (Harlan & Robert, 1998). This study concluded that supervisory support was a key factor contributing to the receipt of accommodations. Therefore an individual who perceives his or her manager or supervisor as being available, accessible, and attentive to one's success is more likely to have increased efficacy (Eden, 1996). Because receiving the necessary accommodation is essential to performing one's job, his or her perception of supervisor support may be important to efficacy beliefs in people with disabilities.

Equally important is the notion of social support. For example, a study evaluating job satisfaction in people with disabilities revealed that poor co-worker

relationships contributed to job dissatisfaction in people with disabilities (Witte et al, 1998). According to Eden, (1996) an individual who perceives that their co-workers meet the required deadlines and carry their own weight, and are helpful, report higher efficacy beliefs. Consequently, social support is also important when considering efficacy in people with disabilities.

The tools and equipment dimension includes the hardware, software, technology, office equipment and/or other peripheral devices needed to performs one's job (Eden, 1996). If an individual perceives his or her work related tools as available, useful, and of good quality, they are more likely to demonstrate better performance as a result of the increased means-efficacy. In contrast, if any individual perceives his or her tools as out of date, unavailable, or broken, their performance is likely to decrease as a result of poor means-efficacy. A governmental study found that one-quarter of the disabled working population use special equipment or technology, and this number is expected to increase with the onset of more assitive technology (DOL, 1999). Because accommodations can be construed as tools needed to do a



job, one's perception of his or her tools may be crucial to efficacy beliefs in people with disabilities.

As evident by the means-efficacy research, the perception of external resources has significant value in the workplace, especially to people with disabilities. Because organizations are legally mandated to provide accommodations to those who can perform the essential functions, the external sources of efficacy surrounding accommodation issues are especially important to people with disabilities. It has been suggested that means-efficacy may be more crucial in jobs with more dependence on external resources e.g., (Eden & Sulimani, 2001). Also, the National Organization on Disability reported that 40% of the people with disabilities who want to work need special equipment or technology to perform the essential job functions (Department of Labor, 1999). Therefore, one's means-efficacy may explain an important part of the turnover problem in individuals with disabilities.

#### Present Study

The present study attempts to augment the existing research by examining the factors predicting unemployment in people with disabilities. It is evident that despite

the Rehabilitation Act of 1973 and the 1990 Americans with Disabilities Act, unemployment for people with disabilities is still too high when compared to the remaining population. Considering the relevant antecedents contributing to the unemployment problem, turnover was reported as an important issue facing people with disabilities. Both the disability and the non-disability literature demonstrated that individual, job, and organizational characteristics significantly predict attitudes and turnover cognitions.

The field of vocational rehabilitation counseling found that one's disability, specifically perceptions of his or her disability and self-concept were major determinants for decreased motivation in the workplace. Acknowledging that individual characteristics alone did not sufficiently explain the decreased motivation, the reviewed literature suggests that both job and organizational characteristics such as the desire for a more interesting job, unfair company practices, and poor coworker relationships predicted job satisfaction in people with disabilities. However, in the process of identifying these key factors, research overlooked the importance of how means-efficacy, individuals' perception

of their organizational resources, influences attitudes and turnover intentions.

A review of the relevant literature supports the consideration of means-efficacy as a central theory for examining motivation among employees with disabilities. Adding means-efficacy is important both theoretically and in practice, because it may demonstrate that organizational factors not just individual and job characteristics are important when examining workplace motivation in people with disabilities. Accommodations are mandated organizational resources used to level the playing field for people with disabilities who depend on the organization to provide quality accommodations in a timely manner. If individuals do not have the proper resource to perform the essential functions of the job, their belief in their ability to complete a task, or the enriching quality of the job is less significant. Therefore the perception of organizational resources may explain incremental variance in the prediction of job satisfaction, organizational commitment, and turnover intentions among people with disabilities. The present study will attempt to explain the unemployment problem in those with disabilities by using means-efficacy together

with self-efficacy and motivating potential score as predictors of job satisfaction, organizational commitment and turnover intentions.

## Hypotheses

### Hypothesis 1a

There will be a positive relationship between self-efficacy and job satisfaction, in that those with higher self-efficacy will be more satisfied with their job.

### Hypothesis 1b

There will be positive relationship between self-efficacy and organizational commitment, in that those with higher self-efficacy will be more committed to the organization.

### Hypothesis 1c

There will be a negative relationship between self-efficacy and turnover intentions. Those with higher self-efficacy will report less turnover intentions.

### Hypothesis 2a

After accounting for the variance of self-efficacy in job satisfaction, there will be a positive relationship between job characteristics and job satisfaction. Those

who have a higher motivating potential score will be more satisfied with their job.

#### Hypothesis 2b

After accounting for the variance of self-efficacy in organizational commitment, there will be a positive relationship between job characteristics and organizational commitment. Those who have a higher motivating potential score will be more committed to the organization.

#### Hypothesis 2c

After accounting for the variance of self-efficacy in turnover intentions, there will be a negative relationship between job characteristics and turnover intentions. Those who have a higher motivating potential score will report less turnover intentions.

#### Hypothesis 3a

Means-efficacy will predict job satisfaction above and beyond that explained by self-efficacy and job characteristics. Those who perceived their means as more useful will be more satisfied with their job.

#### Hypothesis 3b

Means-efficacy will predict organizational commitment above and beyond that explained by self-efficacy and job

characteristics. Those who perceive their means as useful will be more committed to the organization.

#### Hypothesis 3c

Means-efficacy will predict turnover intentions above and beyond that explained by self-efficacy and job characteristics. Those who perceive their means as useful will report less turnover intentions.

## CHAPTER TWO

### METHODS

#### Participants

For this study the participants were working adults with disabilities. Seventy-five percent of the participants were recruited using snowballing techniques through undergraduate psychology students at California State University, San Bernardino (CSUSB). The psychology students received extra credit, in an amount that was determined by the instructor of the course, for getting someone they knew to participate in the study. Other participants included volunteer undergraduate and graduate students receiving academic accommodations through the CSUSB's Services for Students with Disabilities office. These participants were given the option of receiving a five-dollar incentive for participation in the study. Under public law 101-336 section 3, an individual is regarded as being disabled if they have "a physical or mental impairment which substantially limits one or more of the their major life activities, which includes caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working" (ADA,

1990). In addition to having a disability, the participants were in the same job for 90 days, and worked at least 5 hours per week. A power analysis was conducted using Cohen's Power Primer (1992). With the inclusion of three predictors for the Hierarchical Regression, it was calculated that the current study requires 76 working individuals; 107 participants were surveyed in this study.

Out of the 107 participants in the study, 31 were male, and 75 were female. Forty percent of the sample described themselves as white, 27% as Hispanic, 9% as Asian American, 14% as Black, and 8% as Other. The sample age ranged from 18 to 68, with the average being 32. Thirty-three percent of the sample reported mobility as their primary disability, 21% as a visual limitation, 21% as learning, 8% as a communication disability, and 11% as other. Only 48% of the sample reported a secondary disability, and none reported a tertiary disability. Of the 48%, 11% reported a communication disability, 9% a visual disability, 8% mobility, 7% a learning disability, 3% a hearing impairment, and 9% reported other. Eleven percent of the sample was born with his or her disability. The average age the sample acquired a disability was 17 years old. Forty-three percent of the sample worked 20-35



hours a week, 34% of the sample worked 40-60 hours a week, and 20% worked less than 20 hours per week. More than half (53%) the sample reported working in private industry or for private business, 21% reported working for state or local government, 2% for the federal government, 17% for other non-profit organizations, and 8% reported other. The sample worked on average for 4 years with the same organization. Sixty-seven percent of the sample reported never changing their current employer, 15% reported changing employers twice, 11% reported changing employers once, and 7% 3 or more times. When asked what is your current job level?, 78% reported being an employee, 10% a supervisor, 6% a manager, and 6% other.

#### Procedure

Originally, the researcher recruited from the Office of Services to Students with Disabilities, but did not receive an adequate number of surveys back. To collect the remaining surveys, the researcher recruited from undergraduate psychology classes. In order to increase participation, a monetary or extra credit incentive was offered. Since the extra credit was through the psychology department, only the students attending psychology classes

were eligible for both the extra credit and monetary incentive. The remaining participants had only the monetary option.

For the students receiving services through the Office of Services for Students with Disabilities (SSD), permission was requested and granted from the Director. Because students receiving services had a verifiable disability, the only criterion used for them was working in a job at least 90 days at five hours per week. Fliers were placed in the SSD office, and were posted through an email listserve. The participants returned the completed survey to the researcher, and received the five-dollar incentive.

Once permission was received, the researcher went into classes and recruited. Only participants with a disability and who were working more than five hours a week were eligible. The completed surveys were stored in a secure place.

### Materials

This study consisted of the following materials: a letter to the participants (see Appendix A), informed consent form (see Appendix B), The General Means-Efficacy

Scale (see Appendix C), Job Diagnostics Survey (see Appendix D), New General Self-efficacy Scale (see Appendix E), Growth Need Strength Survey (see Appendix F), Minnesota Satisfaction Questionnaire (see Appendix G), Organizational Commitment Survey (see Appendix H), Turnover Intentions (see Appendix I), and a Job History Information Questionnaire (see Appendix J).

#### Means-Efficacy

Means-efficacy, one's perceptions of his or her organizational resources, was measured using Agars, Kottke, and Unckless's (2003) 24-item General Means-Efficacy Scale (GMES) ( $\alpha = .92$ ). Participants chose from a six point Likert scale with the following responses: 1 = strongly agree, 2 = agree, 3 = somewhat agree, 4 = somewhat disagree, 5 = disagree, 6 = strongly disagree. A low score on the scale indicated a high means-efficacy.

#### Job Characteristics

Motivating Potential Score, the belief that positive personal and work outcomes are obtained when three critical psychological states (experienced meaningfulness, experienced responsibility, and knowledge) are present, was measured with the Hackman and Oldham (1975) 21-item

Job Diagnostic Survey ( $\alpha = .83$ ). Participants choose from a seven point Likert scale with the following responses: 1 = very inaccurate, 2 = moderately inaccurate, 3 = slightly inaccurate, 4 = uncertain, 5 = slightly accurate, 6 = moderately accurate, and 7 = very accurate. A high score on the scale indicated a high Motivating Potential Score.

#### Growth Need Strength

Growth Need Strength, the degree to which people strongly value and desire personal feelings of accomplishment and growth, was measured with Hackman and Oldham's (1975) 11-item Growth Need Strength (GNS) scale ( $\alpha = .94$ ). Participants will choose from a seven point Likert scale with the following as anchors: 1 = a moderate amount or less; 4 = very much, and 7 = extremely much. A high score on the scale indicated a high level of growth need strength.

#### Self-Efficacy

Self-efficacy, the belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands was measured with Chen, Gully, & Eden's (2001) 8-item New General Self-efficacy Scale (NGSE)  $\alpha = .94$ . Participants

choose from a five point Likert scale with the following responses: 1 = strongly disagree, 2 = slightly disagree agree, 3 = neither agree nor disagree, 4 = slightly agree, and. A high score on the scale indicated a high level of general efficacy.

#### Job Satisfaction

Job Satisfaction, the extent to which an individual likes his or her job (Hirschfeld, 2000) was measured with (Weiss, Dawis, England, & Lofquist's 1967) 20 -item Minnesota Satisfaction Questionnaire (MSQ) ( $\alpha = .94$ ). Participants choose from a five point Likert scale with the following responses: 1 = very dissatisfied, 2= dissatisfied, 3 = neither, 4 = satisfied, and 5 = very satisfied. A high score on the scale indicated high commitment.

#### Turnover Intentions

Turnover intentions, the belief that thoughts of quitting prompt consideration of job search and leaving (Hom & Griffeth, 1991), were measured with a 3-item scale ( $\alpha = .82$ ). Thoughts of quitting and search intentions will be measured using a 7-point Likert scale. Thoughts of quitting will be assessed by asking: "How often do you

think about leaving your job?" Search intentions will be assessed by asking: "How likely is it that you would see a part time job if you were not in your current job?"

Intentions to quit will be assessed by asking: "What are the chances that you will leave your current job?" A high score indicated higher turnover intentions.

#### Organizational Commitment

Organizational Commitment, the belief that employees who are strongly committed are those who are least likely to leave the organization, was measured with Allen & Meyer (1990) 24- item scale ( $\alpha = .82$ ). Participants chose from a seven point Likert scale with the following responses: 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = moderately agree, and 7 = strongly agree. A high score on the scale indicated high commitment.

#### Job History Information Questionnaire

The questionnaire included questions of hours worked, employer, job tenure, demographic information. Job tenure for this study will be the length of time in current job. Hours worked will be number of hours worked during one workweek. The employer will be used to determine the types

of jobs people with disabilities occupy such as state and local government, federal government, private, non-profit, etc. The demographic information will include sex, age, primary and secondary disability, age at onset of disability, and race.

## CHAPTER THREE

### RESULTS

#### Data Screening

Preliminary analyses were performed using SPSS to assess missing data, outliers (univariate and multivariate), and the assumptions of normality, linearity, and homoscedasticity. The predictors for this study included self-efficacy (NGSE), job characteristics (JDS), and means-efficacy (GME). The outcome variables are job satisfaction (MSQ), organizational commitment (OCQ), and turnover intentions.

The full data set contained responses from a total of 132 participants. Due to a random survey administration error, twenty-three participants were missing large amounts data on the Job Diagnostics Survey, and thus were not included in the analysis. The remaining missing data was at random on the item level. Five random participants were missing only one item on the 24-item General Means-Efficacy Scale, 8-item New General Self-efficacy Scale, 11-item Growth Need Strength Scale, 24-item Organizational Commitment Questionnaire. Two participants missed one item on the 20-item Minnesota Satisfaction Questionnaire, and



from the 3-item Turnover Intentions questionnaire. The participants' remaining items for each scale were averaged, and this number replaced the missing value for the missing items.

The study variables, Turnover Intentions, Organizational Commitment, Job Satisfaction, Means-Efficacy, General Self-efficacy, and Motivating Potential Score were examined for univariate outliers, using z scores and a criterion of  $p < .001$ . Both the Organizational Commitment Questionnaire and the General Means-Efficacy Scale had one extreme score, which was deleted from further analyses. Multivariate outliers between the variables were examined using Mahalanobis distance 16.266,  $p < .001$ , and none were found.

Normality was assessed using z-scores for skewness and kurtosis. Using a criterion of  $p < .001$  none of the z-scores for skewness and kurtosis were significant, and therefore the scales met the assumption of normality. The plots of the standardized residuals against the predicted scores were examined in order to evaluate the assumptions of linearity, and heteroscedasticity. The assumption of linearity was met as the residual plots were rectangular and centered around zero. Heteroscedasticity was met

because the residuals were in an enclosed band and roughly equal in size. Lastly, there was no evidence of multicollinearity or singularity for means-efficacy, general self-efficacy, and motivating potential score, since none the variables were highly correlated with each other. Using the formula  $N \geq 104 + m$ , it was determined that with the 3 predictors a total of 107 cases were needed for a good case to IV ratio for testing individual predictors (Tabanick & Fidell, 2001). After evaluations of the assumptions and missing data, the major analyses were performed on data for 107 individuals.

### Hypotheses

Table 1 (see Appendix K) presents the scale means, standard deviations, reliabilities, and correlations for the study variables. Hierarchical regression analyses were performed on each outcome variable, Job Satisfaction, Organizational Commitment, and Turnover Intentions. For each analysis, predictor variables self-efficacy, Motivating Potential Score, and means-efficacy were entered in three steps. Representing individual characteristics, self-efficacy was entered in the first

step. Representing job characteristics, Motivating Potential Score was entered in Step 2. Measuring organizational characteristics, means-efficacy was added in Step 3. As illustrated in tables 2 through 4, the overall models were significant for each dependant variable.

Table 2 (see Appendix L) shows that a model containing self-efficacy, Motivating Potential Score, and means-efficacy significantly predicted job satisfaction [ $F(3, 103) = 29.47, p < .01, R^2 = .46$ ]. The overall model accounted for 46% of the variance in job satisfaction. Hypothesis 1a stated that self-efficacy would positively predict job satisfaction. Self-efficacy predicted job satisfaction [ $F(1, 105) = 16.34, p < .01, R^2 = .14$ ], supporting the hypothesis. Higher self-efficacy scores indicate that the individual is more satisfied with his job. Self-efficacy accounted for 14% of the variance in job satisfaction.

Hypothesis 2a stated that after accounting for the variance in self-efficacy, job characteristics would positively predict job satisfaction. In step 2, Motivating Potential Score was added. Motivating Potential Score explained unique variance in job satisfaction [ $F_{\text{change}}(1,$

104) = 23.55,  $p < .01$ ,  $\Delta R^2 = .16$ ]. Those who had a higher Motivating Potential Score were more satisfied with their job. After accounting for the variance in self-efficacy, Motivation Potential Score explained 16% of the variance in job satisfaction.

Hypothesis 3a predicted that means-efficacy would improve the prediction of job satisfaction, after accounting for the variance in motivating potential score and self-efficacy. The results showed that in a model containing self-efficacy and motivating potential score, means-efficacy improved the prediction of job satisfaction [ $F_{\text{change}} (1, 103) = 32.06$ ,  $p < .01$ ,  $\Delta R^2 = .17$ ]. Those who perceived their means more useful were more satisfied with their job. Means-efficacy accounted for 17% unique variance in job satisfaction.

Table 3 (see Appendix M) shows that a model containing self-efficacy, motivating potential score, and means-efficacy significantly predicted organizational commitment [ $F (3, 103) = 7.74$ ,  $p < .01$ ,  $R^2 = .18$ ]. Overall, the model explained 18% of the variance in organizational commitment. Hypothesis 1b, self-efficacy would be positively related to organizational commitment, was not

supported [ $F(1, 105) = 2.79, ns$ ]. Hypothesis 2b predicted that after accounting for the variance in self-efficacy, Motivating Potential Score would predict organizational commitment. The results showed that Motivating Potential Score improved the prediction of organizational commitment [ $F_{\text{change}}(1, 104) = 9.59, p < .01, \Delta R^2 = .08$ ]. Those who had a higher Motivating Potential Score were more committed to their jobs. After accounting for the variance in Self-efficacy, Motivating Potential Score explained 8% of the variance in organizational commitment.

Hypothesis 3b predicted that means-efficacy would improve the prediction of organizational commitment, after accounting for the variance in Motivating Potential Score and self-efficacy. The results showed that in a model containing self-efficacy and Motivating Potential Score, means-efficacy, improved the prediction of organizational commitment [ $F_{\text{change}}(1, 103) = 9.56, p < .01, \Delta R^2 = .08$ ]. Those who perceived their means as more useful were more committed to their organization. Means-efficacy accounted for 8% unique variance in organizational commitment.

Table 4 (see Appendix N) illustrates that a model containing self-efficacy, Motivating Potential Score, and

means-efficacy significantly predicted turnover intentions [ $F(3, 103) = 2.89, p < .05, R^2 = .08$ ]. The overall model explained 8% of the variance in turnover intentions. Hypothesis 1c predicted that self-efficacy would significantly predict turnover intentions. The results did not show support for this hypothesis [ $F(1, 105) = .721, ns$ ]. Motivating Potential Score was added to improve prediction. Hypothesis 2c stated that after accounting for the variance in self-efficacy, motivating potential score would significantly predict turnover intentions. Again, the results did not support the hypothesis [ $F_{\text{change}}(1, 104) = 2.08, ns$ ]. Lastly, means-efficacy was added to improve prediction. Hypothesis 3c stated that means-efficacy would predict turnover intentions, beyond the variance explained by self-efficacy and motivating potential score. As predicted, means-efficacy improved the prediction of turnover intentions [ $F_{\text{change}}(1, 103) = 5.73, p < .05, \Delta R^2 = .05$ ]. Those individuals, who perceived their means as more useful, reported lower turnover intentions. Mean-efficacy accounted for 5% unique variance in turnover intentions.

## Exploratory Analyses

To further understand the importance of means-efficacy as it related to job attitudes and turnover intentions in people with disabilities, exploratory analyses were preformed on the data. First, bivariate relationships between the eight dimensions of means-efficacy, time, performance feedback, supervisor support, social support, tools, team, and information, and the dependant variables were examined. As shown in Table 5 (see Appendix O), social support ( $r = -.22$ ), tools ( $r = -.27$ ), and team ( $r = -.19$ ) were significantly and negatively related to turnover intentions. Those individuals, who perceived their tools as useful, reported lower turnover intentions. Time ( $r = .35$ ), social support ( $r = .35$ ), tools ( $r = .26$ ), team ( $r = .30$ ), training ( $r = .26$ ), and performance feedback ( $r = .32$ ) were significantly related to organizational commitment. As indicated, time and social were the highest bivariate relationships for organizational commitment. Those individuals who perceived themselves as having enough time to complete work were more committed to their organization. Equally, those individuals who perceived their relationships with co-workers as positive were more committed to their job. All

the dimensions of means-efficacy were significantly related to job satisfaction. Time ( $r = .50$ ) was revealed as having the highest correlation with job satisfaction. Those individuals, who perceived themselves as having ample time to complete their work, were more satisfied with their job.

Further exploratory analyses were conducted to examine the interaction between Growth Need Strength and Motivating Potential Score (MPS). As indicated by the literature for Hackman and Oldham's job characteristics model, Growth Need Strength moderates the relationships between job characteristics and outcomes such as turnover and job satisfaction (1975). A series of hierarchical regression analyses were performed with the same outcome variables, job satisfaction, organizational commitment, and turnover intentions. The predictor variables were entered in five steps. As with the main analysis, self-efficacy and MPS were entered in Step 1 and Step 2 respectively. Growth Need Strength (GNS) was entered in Step 3, and the interaction between GNS and MPS was added in Step 4. Finally, means-efficacy was added in Step 5.

The results for these analyses can be viewed in Tables 6 through 8. As illustrated in Table 6 (see



Appendix P) the overall model significantly predicted job satisfaction [ $F(5, 101) = 18.24, p < .01, R^2 = .47$ ]. This model accounted for 47% of the variance, self-efficacy accounted for 14%, MPS accounted for 16%, and means-efficacy accounted for 17%. Neither GNS nor the interaction accounted for any unique variance.

Table 7 (see Appendix Q) revealed that a model containing self-efficacy, MPS, Growth Need Strength, the interaction between GNS and MPS, and means-efficacy significantly predicted organizational commitment [ $F(5, 101) = 4.65, p < .01, R^2 = .19$ ]. This model accounted for 19% of the variance in organizational commitment, MPS accounted for 8%, and means-efficacy accounted for 7%. Self-efficacy, GNS, and the interaction were each non-significant.

Lastly, Table 8 (see Appendix R) shows the overall model did not predict turnover intentions. However, means-efficacy proved to be significant and accounted for 5% of unique variance in turnover intentions. As demonstrated by the results in Tables 6 through 8, the additions of Growth Need Strength and the interaction did not improve the prediction of outcomes. However, adding these two variables and not increasing the sample size reduced the

power. Consequently, the sample size was not large enough to detect smaller effects.

Other exploratory analyses were performed to further understand the disabled population as they differ on key study variables. Using ANOVA, mean differences in the study variables were examined based on four demographic characteristics, gender, type of disability, type of industry, and job tenure. The results for these analyses can be viewed in Tables 9, 10, and 11. As shown in Table 9 (see Appendix S), there were significant mean differences between gender and turnover intentions, [ $F(1,107) = 10.164, p < .01$ ]. Women reported higher turnover intentions than men, 4.58 and 3.38, respectively. There were significant mean differences between gender and organizational commitment [ $F(1,107) = 8.044, p < .05$ ]. Men were more committed to the organization than women, 4.32 and 3.86, respectively. Also as shown in Table 10 (see Appendix T), type of industry was not significant. Also, as shown in Table 11 (see Appendix U) there were no significant mean differences based type of disability. There may not have been enough individuals represented in each group to detect differences.

## CHAPTER FOUR

### DISCUSSION

#### General Discussion

Overall, this study provided empirical evidence that individual characteristics, job characteristics, and organizational characteristics are important when examining workplace attitudes and turnover intentions in people with disabilities. Self-efficacy, job characteristics, and means-efficacy were key predictors of job satisfaction, while job characteristics and Means-efficacy were the chief predictors of organizational commitment. Finally, Means-efficacy was the only predictor of turnover intentions.

These results supported the theoretical framework provided by the disability literature (Hershenson, 1981; Conte, 1983; Trevino & Szymanski, 1996; Balfour & Wechsler, 1996; Petrovski & Gleeson, 1997; & Crudden, 2002) in that individual, job, and organizational characteristics influence job satisfaction and turnover intentions among people with disabilities. Much of this earlier research focused on a specific disability or was qualitative in nature (Nisbet & York, 1989, Geyer &

Schroeder, 1998; Witte et al, 1998 & Crudden, 2002). By empirically examining a wide range of disabilities, the present study was able to substantiate and strengthen researchers' understanding of disability issues relating to workplace motivation. Further, by examining means-efficacy, defined here as the individuals' perception of organizational resources, the present study was able to add important understanding beyond the role of organizational characteristics in influencing turnover intentions among the disabled population.

#### Individual Characteristics

This study found self-efficacy, beliefs in one's ability to complete a task (Bandura, 1977), positively predicted job satisfactions. Thus the more individuals believe they can succeed at a task, the more they are satisfied with their jobs. Acknowledging that self-efficacy and self-concept, individuals' general perception of themselves (Conte, 1984), are similar in their explanation and prediction of work place motivation (Bon & Skaalvik, 2003), the present study enhanced theoretical support for the impact of individual characteristics on job satisfaction in the disabled population. Previous

support had been found (Hershenson, 1981) as to the importance of self-concept as it relates to job satisfaction among people with disabilities. Specifically, a negative perception of one's self was negatively related to job satisfaction. Similarly, the Efficacy research found that those individuals who reported higher Self-efficacy performed better and demonstrated more job satisfaction (Caplan, Vinokur, Price & van Ryn, 1989).

This study also corroborated the efforts that practitioners have taken to increase job satisfaction by enhancing self-concept and self-efficacy (Hershenson, 1981). Hershenson emphasized the importance of increasing job satisfaction by increasing self-concept, and found that by increasing job satisfaction, job retention increased. Additionally, the mainstream literature provided empirical evidence that Self-efficacy can be increased through training (Caplan et al, 1989). After an intervention designed to increase self-efficacy, the participants reported more job satisfaction and higher motivation. For decades, researchers and practitioners have been examining ways to increase job satisfaction among people with disabilities, and this study provided

support for the benefits of increasing self-efficacy among the disabled populations as well.

### Job Characteristics

The results of this study also demonstrated that job characteristics explain incremental variance in job satisfaction and organizational commitment in people with disabilities. According to Hackman and Oldham's job characteristics model (1975), individuals' Motivating Potential Score (skill variety, task identity, task significance, autonomy, and feedback) significantly predicted absenteeism, performance, and workplace motivation. They also found Growth Need Strength, the degree to which an individual desires growth in his or her job, to moderate this relationship. Yet due to the limitation of power, the present study was unable to adequately determine if Growth Need Strength moderated the relationship. The present findings did support as well as augment the existing disability literature as job characteristics relate to job satisfaction (Petrovski & Gleeson, 1997). Specifically, individuals who reported that their job had more skill variety, task identity, task

significance, autonomy, and feedback were more satisfied with their jobs.

With respect to job characteristics and job satisfaction, these findings are similar to the results that Petrovski and Gleeson (1997) found when examining factors related to job satisfaction in people with mild intellectual disabilities. They discovered that a desire for a more interesting and challenging job influenced job satisfaction more than self-esteem and personal aspirations. Similarly, Test, Hinson, Solow, and Keul (1993) found that individuals in a supported employment program were more satisfied when their tasks were more interesting and new. Witte et al. (1995) found that task significance and skill variety lead to higher job satisfaction in college graduates with learning disabilities.

Organizational commitment has been described as the degree to which an individual identifies him or herself with the organization (Porter et al, 1974). Currently, there is no relevant research done examining this outcome in people with disabilities. However, the present study provided empirical support for the importance of organizational commitment as well as demonstrated the

significance of job characteristics among people with disabilities. This study found that people with disabilities were more committed to their organization when they perceived their jobs as more meaningful, interesting, and autonomous. These findings are consistent with mainstream literature (Balfour & Wechsler, 1996; Mor Barak, Nissly, & Levin, 2001). Balfour found that public service employees were more committed to their organization when they perceived their tasks as more significant. Similarly, Mor Barak et al. determined that task clarity and skill utilization were related to organizational commitment in state and federal governmental employees. Overall, the present study demonstrated that after accounting for the variance in Self-efficacy, job characteristics added meaningful prediction of job satisfaction and organizational commitment in those individuals with disabilities.

#### Means-Efficacy

Means-efficacy, individuals' perception of organizational resources (Eden, 1996), made a significant contribution to the prediction of job satisfaction, organizational commitment, and turnover intentions among



people with disabilities. Based on Eden's work (1996), means-efficacy is a two-fold construct including general and specific sources. The general sources of means-efficacy include the organization, technology (software), managerial leadership, and work groups. The specific sources of means-efficacy include internal services, tools (hardware), supervisory leadership, team on specific tasks, and ad hoc task forces.

Acknowledging the theoretical and practical implications of general means-efficacy, Agars, Kottke, and Unkless (2005) developed the General Means-Efficacy Scale (GMES). This scale taps into eight dimensions, information, supervisor support, time, social support, tools, team, and performance feedback, of general means-efficacy. Despite the low reliabilities on a few of the subscales, the present study found good reliability for the overall GMES. The present study provided additional support for the use of the GMES as a tool to further the research of means-efficacy. This study found that means-efficacy explained substantial incremental variance in job satisfaction, organizational commitment, and turnover intentions. Specifically the more individuals perceived information, supervisor support, time, social support,

tools, team, and performance feedback as available, the more satisfied and committed to work they were, and the less likely they were to have thoughts of turnover. Considering that self-efficacy and job characteristics have longstanding support for their importance to workplace attitudes and turnover cognitions (Hackman & Oldham, 1975; Hershenson, 1981; & Petrovski & Gleeson, 1997), the fact that this present study showed that means-efficacy is comparable to job characteristics in the explanation of unique variance in job satisfaction and organizational commitment is meaningful. Perhaps even more important is the evidence that means-efficacy was the only predictor of turnover intentions.

The disability research suggests that social support and tools are important as they relate to job satisfaction and voluntary turnover (Geyer & Schroedel, 1998, Crudden, 2002, & Rumril, Roessler, Vierstra, Hennessey, & Staples, 2004). Witte et al. (1998) found that poor co-worker relationships led to job dissatisfaction in people with learning disabilities. Roessler's (2002) single case study provided support for the importance of quality accommodations, tool. The individual reported that the lack of quality accommodations led to her leaving the job.

Crudden's case study (2002) found that technology was critical to job retention in those with visual impairments. Along that same line, Geyer and Schroedel discovered that the availability of a TDD (an accommodation for those who are deaf or hearing impaired) was significantly related to job search behavior. Further supporting the disability literature, the exploratory analysis in the present study found that all eight dimensions of the GMES were positively related to job satisfaction. All but information and supervisor support were positively related to organizational commitment. Also, tools, social support, and team were negatively related to turnover intentions, suggesting that people with disabilities who perceive their tools and co-workers as useful are less likely to have thoughts of quitting or engage in job search behavior.

The present study also corroborated the results Eden and Sulimani (2001) found when comparing self-efficacy and means-efficacy in instructor performance at an Israeli Gunnery School. They discovered that means-efficacy more than self-efficacy predicted performance, suggesting that in jobs with more dependence on tools, means-efficacy is a better predictor of performance. The present study found

that means-efficacy more than self-efficacy was a better predictor of workplace attitudes and turnover cognitions among people with disabilities. Since accommodations are legally mandated tools organizations provide, people with disabilities often have jobs with more dependence on tools. For example, most of the non-disabled population uses computers to perform critical job tasks. However, a visually impaired individual not only depends on the computer, but also on an accommodation like ZoomText, a screen reader, to access the computer. Most importantly, this study demonstrated that means-efficacy is central in understanding and predicting workplace motivation among people with disabilities. Specifically, organizational resources are critical predictors of job satisfaction, organizational characteristics, and turnover intentions, as they were in this study, even more important than personal efficacy and perceptions of job characteristics.

### Implications

This study was able to advance the understanding of disability issues relating to workplace motivation. As a whole, the disability research focuses on the impact of internal factors such as income, health, disability, and

self-concept as they relate to job retention and job satisfaction. However, this study demonstrated that organizational factors not only influence workplace attitudes and turnover cognitions, but also better predict these outcomes than self-efficacy and job characteristics. Not only does this study add to the theoretical understanding of workplace motivation, but it provides both the vocational and organizational fields with empirical evidence with increased generalizability. For example, much of the current disability related research is qualitative or focuses on a specific disability. This study was able to examine the relationships in population representing a wide range of disabilities.

The results of this study are of potential interest to those hiring people with disabilities as well as those responsible for transitioning these individuals into the workplace. Means-efficacy has brought a greater focus to the factors that promote or inhibit job satisfaction, organizational commitment and turnover intentions in people with disabilities. Clearly, the perception of accommodations and other organizational resources is critical to workplace motivation among the disabled population.

The results of this study can be a resource to managers and supervisors of people with disabilities. Like any other employee, a person with a disability needs positive experiences with feedback, sufficient time to complete tasks, supervisor and co-worker support, quality tools, training, and information about the organization. However, unlike the non-disabled employee, these factors typically impact the provision of one's accommodation. It is at this point where means-efficacy becomes especially important to those with disabilities. In order to receive an accommodation, individuals have to rely on their supervisor to place request and monitor the length of time it takes to receive it. If the accommodation is not received in an adequate amount of time, productivity suffers. Also, individuals may become more dependent on the understanding of their co-workers when deadlines are not met. It is understandable that the perception of these resources influences job satisfaction, organizational commitment, and ultimately turnover intentions. A 1999 Department of Labor study found that one-quarter of the disabled working population used special equipment or technology, and that this number is expected to increase with the use of more assistive technology. The more aware

management is of the importance of means-efficacy, the better prepared they can be when accommodations are needed.

Not only relevant to individuals in management, these results are also important to rehabilitation counselors and placement programs. It is the goal of these professionals to locate and prepare their clients for employment. By acknowledging the relationship between means-efficacy and job satisfaction, placement providers can improve the success of placing a greater number of individuals in satisfying jobs. In that those individuals who are dissatisfied with their jobs are more prone to turnover intentions and turnover, reducing successful placements (Roessler, 2004). By educating both employers and their clients about the importance of organizational resources, job developers can convey to employers the benefits of providing quality resources. Also, counselors can teach their clients to advocate for themselves. An employee who knows she needs a modified keyboard can provide the employer with information needed to attain the accommodations. This can save time for both the employee and employer. The placement program can provide employers with information about the tax incentives they can receive

for hiring people with disabilities and providing accommodations. Many employers are unaware of how easy and inexpensive accommodations can be to provide, and are also unaware of how the absence of such accommodations influences those who need them. People with disabilities are dependent on their accommodations to perform the functions of the job, and more studies are showing how accommodations not only impact work performance, but influence workplace attitudes (Petrovksi & Gleeson, 1997 & Crudden, 2002).

#### Limitations and Future Research

There were a few limitations to this study that should be examined in hopes that future research can improve upon them. From a design and internal validity perspective, one limitation was length of the survey. For people with certain visual and learning disabilities, a long survey may be difficult or confusing, which could result in survey fatigue. Survey fatigue may be responsible for the low reliabilities in the subscales at the end of the packet. Future research could examine whether shorter versions of the scales are available or focus on one motivational outcome.



Another important limitation is the method used to determine disability. Disability was determined by self-report. Using the civil rights definition as criteria, a disability is a physical or mental impairment that substantially limits one or more major life activities (ADA), individuals who believed they qualified filled out the survey. Even though disability has been determined by self-report in other studies (Yelin, 2003). Future research could make sure the participants had a verifiable disability.

External validity and generalizability was limited by the sample. Participants were recruited from students in several university undergraduate psychology classes. Also, in order to prevent harm to those with mental impairments and developmental disabilities, the sample excluded people with psychological and developmental disabilities.

Lastly, statistical power may have limited the results. Although the sample size was adequate to perform the main analyses, there was not enough power to perform additional analyses with Growth Need Strength and the interaction added to the model.

Future research should examine if the General Means-Efficacy Scale (GMES) has similar results with a sample

including psychological disabilities as well as those with verifiable disabilities. Also future research can investigate how GMES relates to other workplace outcomes in people with disabilities, such as performance and absenteeism. Furthermore, researchers can determine if certain GMES dimensions better predict job attitudes in people with disabilities. Finally, future research could determine if means-efficacy would yield similar results when using other individual characteristics such as income, education, family support, and/or gender as predictors.

### Conclusion

Self-efficacy, job characteristics, and means-efficacy predicted job satisfaction, while job characteristics and means-efficacy were the main predictors of organizational commitment. Means-efficacy, however, was the only predictor of turnover intentions. Advancing the understanding of disability issues related to workplace motivation, this study demonstrated that means-efficacy is critical in understanding and predicting workplace attitudes and turnover intentions. Because these resources impact the provision of accommodations, it is

understandable that the perceptions of them influence workplace attitudes. By understanding the importance of means-efficacy, managers and placement programs can ensure higher job satisfaction, greater organizational commitment, and lower turnover intentions in people with disabilities.

APPENDIX A  
PARTICIPANT LETTER

Dear Participant,

Thank you considering participation in this research. The purpose of these surveys is to investigate aspects of your current working environment. The surveys should take no longer than one hour to complete.

For your convenience, this survey is available in either a hard copy or on line at [http://enrollment.csusb.edu/~waiv/ns\\_survey/](http://enrollment.csusb.edu/~waiv/ns_survey/). For other alternative formats please call Naomi Schmierer at 909-880-7207.

If completing the survey on line, please submit the survey by pressing the submit button. Otherwise, return your completed survey and demographic information sheet in the enclosed self-addressed, stamped envelope as soon as possible. Please complete the survey as soon as possible but not later than **February 25, 2005**

Your participation is totally voluntary, and thank you for your time and help in this important research.

Sincerely,

Naomi Schmierer

APPENDIX B  
INFORMED CONSENT

## Informed Consent

You are invited to participate in a study designed to investigate aspects of how one views his or her work environment. This study is being conducted by Naomi Schmierer as a requirement for a masters degree in Industrial/Organizational Psychology. This study is under the supervision of Dr. Mark Agars, Assistant Professor of Psychology. This study has been approved by the Department of Psychology Institutional Review Board of California State University, San Bernardino. The University requires that you give your consent before participating in a research study.

This survey should take no longer than 60 minutes to complete. There are no foreseeable risks or direct benefits to you for your participation in this study. Please be assured that any information you provide will be held in strict confidence by the researchers. At no time will your name be reported with your responses. Your name will not be collected. Consequently all responses are anonymous. All data will be reported in group form only. At the discretion of your instructor, 3 units of extra credit will be offered for participation in this study. You also have the option of receiving a \$5 dollar cash incentive. If you would like to receive a report of the results, a report will be available after December 2005 by contacting Dr. Mark Agars at 909-880-5433.

Please understand that your participation in this research is totally voluntary and you are free to withdraw at anytime during this study without penalty, and remove any data at any time during this study.

Any questions or inquiries about this research should be directed to Dr. Mark Agars at 909-880-5433.

By placing a mark in the space provided below, I acknowledge that I have been informed of, and understand, the nature and purpose of this study, and I freely consent to participate. By this mark I further acknowledge that I am at least 18 years of age.

Give your consent to participate by making a check or "X" mark

here: \_\_\_\_\_

Today's date is \_\_\_\_\_.

APPENDIX C

GENERAL MEANS-EFFICACY SCALE



Items in each subscale are as followed

Tools- 7,15,19; Time- 5,6,18; Information- 1,10,16; Performance  
Feedback- 8,9,20; Training, 2,11,21; Social Support, 12,13,17;  
Supervisor Support- 3,4,14; Team- 22,23,24.

- 1 Current information is often difficult to get at the time I need it to do my job.
- 2 This organization provides adequate training for its employees.
- 3 Managers are accessible when problems arise.
- 4 My supervisor has an open-door policy and sticks to it.
- 5 My supervisor provides me with enough time to complete the tasks I am required to do.
- 6 In this organization, most employees feel that there is sufficient time to do their jobs and do them well.
- 7 Much of the computer software that I use in my job is out of date.
- 8 A lack of communication in this organization often leaves me uncertain about how well I am doing my job.
- 9 Supervisors in this organization take the time to let employees know when they are doing a good job.
- 10 Employees in this organization usually have clear instructions on how to do their jobs.
- 11 This organization has many training opportunities for its employees.
- 12 I have positive working relationships with my co-workers.
- 13 I can count on my co-workers to do their part of the job.
- 14 Management is never around to answer questions.
- 15 This organization provides me with the equipment that I need to do my job.
- 16 I have the necessary informational material (e.g., instruction manuals) to do my job.
- 17 I can count on my co-workers for support.
- 18 I have adequate time to do my job.
- 19 The tools and technology in this organization are state-of-the-art.
- 20 I receive informational feedback about my performance.
- 21 This organization rewards employees for developing their work skills.
- 22 I can count on my team members to pull their weight whenever we are working on a team project.
- 23 My team pulls together.
- 24 I have confidence in my co-workers' abilities.

APPENDIX D  
JOB DIAGNOSTIC SURVEY

Items in each subscale are as followed:

Skill Variety- 4,8,12; Task Identity- 3,10,18; Task Significance- 5,15,21; Autonomy- 2,16,20; Feedback from the job, 7,11,19; Feedback from agents, 6,14,17; Dealing with Others- 1,9,13.

1 To what extent does your job require you to work closely with other people (either clients, or people in related jobs in your own organization)?

Very little, some dealing with others is necessary, very much dealing with other people in an absolutely essential and crucial part of doing the job (scored 1, 4, and 7 respectively).

2 How much autonomy is there in your job? That is to what extent does your job permit you to decide on your own how to go about the work?

Very little, the jobs gives me almost no personal say about how and when the work is done; Moderate autonomy, many things are standardizes and not under my control, but I can make some decisions about the work; Very much, the job gives me almost complete responsibility for deciding how and when the work is done.

3 To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

My job is only a tine part of the overall piece of work, the results of my activities cannot be seen in the final product or service, My job is a moderate sized "chunk" of the overall piece of work, my own contribution can be seen in the final outcome; My job involves doing the whole piece of work from start to finish, the results of my activities are easily seen in the final product or service.

4 How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

Very little, the job requires me to do the same routine things over and over again; Moderate variety; Very much, the job requires me to do many different things, using a number of different skills and talents.

5 In general how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well being of other people?

Not very significant, the outcomes of my work are not likely to have important effects on other people; Moderate significant; Highly significant, the outcomes of my work can affect other people in very important ways.

6 To what extent do managers or co-workers let you know how well you are doing on your job?

Very little, people almost never let me know how well I am doing; Moderately, sometimes people may give me "feedback", other times they may not; Very much, managers or co-workers provide me with almost constant "feedback" about how well I am doing.

7 To what extent does doing the job itself provide you with information about your work performance? That is does actual work itself provide clues about how well you are doing-aside from any "feedback" co-workers or supervisors may provide?

Very little, the job itself is set up so I could work forever without finding out how well I am doing; Moderately, sometimes doing the job provides "feedback" to me, sometimes it does not; Very much, the job is set up so that I get almost constant "feedback" as I work about how well I am doing.

Items 8 to 21: Very inaccurate; Mostly inaccurate; Slightly inaccurate; Uncertain; Slightly accurate; Most accurate; Very accurate

8 The job requires me to use a number of complex or high-level skills

9 The job requires a lot of co-operative work with other people.

10 The job is arranged so that I do not have the chance to do any entire piece of work from beginning to end. (R)

11 Just doing the work required by the job provides many chances for me to figure out how well I am doing.

12 The job is quite simple and repetitive. (R)

13 The job can be done adequately by a person working alone-without talking or checking with other people. (R)

14 The supervisor and co-workers on this job almost never give me any "feedback" about how well I am doing in my job. (R)

15 This job is one where a lot of other people can be affected by how well the work gets done.

16 The job denies me any chance to use my personal initiative or judgment in carrying out the work. (R)

17 Supervisors often let me know how well they think I am performing the job.

18 The job provides me the chance to completely finish the pieces of work I begin.

- 19 The job itself provides very few clues about whether or not I am performing well. (R)
- 20 The job gives me considerable opportunity for independence and freedom in how I do the work.
- 21 The job itself is not very significant or important in the broader scheme of things. (R)

APPENDIX E  
GROWTH NEED STRENGTH SCALE

- 1 High respect and fair treatment from my supervisor.
- 2 Stimulating and challenging work.
- 3 Chance to exercise independent thought and action in my job.
- 4 Great job security.
- 5 Very friendly co-workers.
- 6 Opportunity to learn new things from my work.
- 7 High salary and good fringe benefits.
- 8 Opportunities to be creative and imaginative in my work.
- 9 Quick promotions.
- 10 Opportunities for personal growth and development in my job.
- 11 A sense of worthwhile accomplishments in my work.

APPENDIX F

NEW GENERAL SELF-EFFICACY SCALE



- 1 I will be able to achieve most of the goals that I have set for myself.
- 2 When facing difficult tasks, I am certain that I will accomplish them.
- 3 In general, I think that I can obtain outcomes that are important to me.
- 4 I believe I can succeed at most any endeavor to which I set my mind.
- 5 I will be able to successfully overcome many challenges.
- 6 I am confident that I can perform effectively on many different tasks.
- 7 Compared to other people, I can do most tasks very well.
- 8 Even when things are tough, I can perform quite well.

APPENDIX G

MINNESOTA SATISFACTION QUESTIONNAIRE

The items in each subscale is as followed:

Intrinsic- 1,2,3,4,7,8,9,10,11,15,16,20; Extrinsic-  
5,6,12,13,14,19

General Satisfaction-

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17, 18, 19, 20

- 1 Being able to keep busy all the time
- 2 The chance to work alone on the job
- 3 The chance to do different things from time to time.
- 4 The chance to be "somebody" in the community.
- 5 The way my boss handles his/her workers.
- 6 The competence of my supervisor in making decisions.
- 7 Being able to do things that don't go against my
- 8 They way my job provides for steady employment.
- 9 The chance to do things for other people.
- 10 The chance to tell people what to do.
- 11 The chance to do something that makes use of my
- 12 The way company policies are put into practice.
- 13 My pay and the amount of work I do.
- 14 The chance for advancement on this job
- 15 The freedom to use my own judgment.
- 16 The chance to try my own methods of doing the job.
- 17 The working conditions.
- 18 The way my co-workers get along with each other.
- 19 The praise I get for doing a good job.
- 20 The feeling of accomplishment I get from the job.

APPENDIX H  
TURNOVER INTENTIONS ITEMS

Items in each subscale:

Thoughts of quitting 1, Intentions to search 2, and intentions to quit, 3.

- 1 How often do you think about leaving your job?
- 2 How likely is it that you would see a part time job if you were not in your current job
- 3 What are the chances that you will leave your current job?

APPENDIX I

ORGANIZATIONAL COMMITMENT QUESTIONNAIRE

The items in each subscale are as followed:

Affective Commitment- 1, 2, 3, 4, 5, 6, 7, 8; Continuance

Commitment- 9, 10, 11, 12, 13, 14, 15, 16; Normative

Commitment-17, 18, 19, 20, 21, 22, 23, 24

- 1 I would be very happy to spend the rest of my career with this organization.
- 2 I enjoy discussing my organization with people outside it.
- 3 I really feel as if this organization's problems are my own.
- 4 I think that I could easily become as attached to another organization as I am to this one. (R)
- 5 I do not feel like part of the family at my organization. (R)
- 6 I do not feel emotionally attached to this organization. (R)
- 7 This organization has a great deal of personal meaning for me.
- 8 I do not feel a strong sense of belonging to my organization. (R)
- 9 I am not afraid of what might happen if I quit my job without having another one lined up. (R)
- 10 It would be very hard for me to leave my organization right now, even if I wanted to.
- 11 Too much in my life would be disrupted if I decided I wanted to leave my organization now.
- 12 It wouldn't be too costly for me to leave my organization now. (R)
- 13 Right now, staying with my organization is a matter of necessity as much as desire.
- 14 I feel that I have too few options to consider leaving this organization.
- 15 One of the few serious consequences of leaving this organization would be the scarcity of available alternatives.
- 16 One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice-another organization may not match the overall benefits I have here.
- 17 I think that people these days move from company to company too often.
- 18 I do not believe that a person must always be loyal to his or her organization. (R)
- 19 Jumping from organization to organization does not seem at all unethical to me. (R)
- 20 One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligations to remain.
- 21 If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.

- 22 I was taught to believe in the value of remaining loyal to one organization.
- 23 Things are better in the days when people stayed with one organization for most of their careers.
- 24 I do not think that waiting to be a 'company man' or company woman' is sensible anymore. (R)



APPENDIX J

JOB HISTORY INFORMATION  
QUESTIONNAIRE

We would appreciate your response to the following questions about yourself.  
This information is for statistical purposes only. All information is anonymous.

1. Age: \_\_\_\_\_
2. Sex (Circle)    Male    Female
3. Ethnicity (Circle)
  - a. Native-American
  - b. White (Caucasian, non-Hispanic)
  - c. Hispanic-American
  - d. Asian-American
  - e. Black (African American)
  - f. Other: \_\_\_\_\_
4. Please indicate your disability by placing an X next to..
  - a. your primary disability ( most significant disability) select only 1  
\_\_\_\_ Visual Limitation  
\_\_\_\_ Learning Disability  
\_\_\_\_ Deaf (Hard of Hearing)  
\_\_\_\_ Mobility Limitation  
\_\_\_\_ Communication Disability  
\_\_\_\_ Other: \_\_\_\_\_
  - b. your secondary disability ( second most significant disability) select only 1.  
\_\_\_\_ Visual Limitation  
\_\_\_\_ Learning Disability  
\_\_\_\_ Deaf (Hard of Hearing)  
\_\_\_\_ Mobility Limitation  
\_\_\_\_ Communication Disability  
\_\_\_\_ Other: \_\_\_\_\_
  - c. Other: \_\_\_\_\_
5. When did you acquire your primary disability (how old were you) \_\_\_\_\_ years?
6. How many hours per week do you work (put number of hours) \_\_\_\_\_ hours?
7. How would you categorize your current employer?
  - a. Private Industry or business
  - b. State or local government
  - c. Federal government
  - d. Other nonprofit organization
  - e. Other (please specify): \_\_\_\_\_
8. Please indicate the length of time you have worked in your present organization (or the organization you are referencing in your answers): \_\_\_\_\_ years \_\_\_\_\_ months.
9. How many times have you changes organizations in the last 3 years \_\_\_\_\_ (# years)?
10. Please circle the job level which best represents the level of your current job:
  - a. Employee
  - b. Supervisor
  - c. Manager
  - d. Other: \_\_\_\_\_

APPENDIX K

TABLE 1 MEANS, STANDARD DEVIATIONS,  
RELIABILITIES, AND CORRELATIONS  
FOR STUDY VARIABLES

Table 1: Means, standard deviation, reliabilities, and correlations for study variables.

| Variable   | M    | SD   | 1      | 2     | 3     | 4     | 5     | 6     | 7   |
|------------|------|------|--------|-------|-------|-------|-------|-------|-----|
| 1 Turnover | 4.18 | 1.98 | .92    |       |       |       |       |       |     |
| 2 OCQ      | 4.02 | 0.74 | -.47** | .82   |       |       |       |       |     |
| 3 MSQ      | 3.42 | 0.74 | -.29** | .48** | .91   |       |       |       |     |
| 4 GME      | 4.02 | 0.67 | -.23   | .41** | .61** | .92   |       |       |     |
| 5 JDS      | 4.56 | 0.86 | -.08   | .33** | .64** | .56** | .83   |       |     |
| 6 GNS      | 4.55 | 1.55 | .03    | .05   | .32** | .16   | .32** | .94   |     |
| 7 NGSE     | 4.04 | 0.91 | .08    | .16   | .46** | .30** | .50** | .34** | .94 |

N= 107, Note: Coefficient alpha are reported along the diagonal. \*p .05 \*\*p .01

APPENDIX L

TABLE 2 SUMMARY OF HIERARCHICAL  
REGRESSION ANALYSIS FOR VARIABLES  
PREDICTING JOB SATISFACTION

**Table 2: Summary of hierarchical regression analysis for variables predicting job satisfaction**

| Independent Variables      | B   | SE_B | $\beta$ |
|----------------------------|-----|------|---------|
| <b>Step 1</b>              |     |      |         |
| Self-efficacy              | .34 | .09  | .37**   |
| <b>Step 2</b>              |     |      |         |
| Self-efficacy              | .13 | .09  | .14     |
| Motivating Potential Score | .43 | .09  | .46**   |
| <b>Step 3</b>              |     |      |         |
| Self-efficacy              | .11 | .08  | .12     |
| Motivating Potential Score | .18 | .09  | .20*    |
| Means-efficacy             | .51 | .09  | .49**   |

Note:  $R^2 = .14$  for Step 1;  $\Delta R^2 = .16$  for Step 2;  $\Delta R^2 = .17$  for Step 3,  $N = 107$ . \*\* $p < .01$ ; \* $p < .05$

## APPENDIX M

### TABLE 3 SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR VARIABLES PREDICTING ORGANIZATIONAL COMMITMENT

**Table 3: Summary of hierarchical regression analysis for variables predicting organizational commitment**

| Independent Variables      | B    | SE_B | $\beta$ |
|----------------------------|------|------|---------|
| <b>Step 1</b>              |      |      |         |
| Self-efficacy              | .15  | .09  | .16     |
| <b>Step 2</b>              |      |      |         |
| Self-efficacy              | -.01 | .09  | -.01    |
| Motivating Potential Score | .31  | .10  | .33**   |
| <b>Step 3</b>              |      |      |         |
| Self-efficacy              | -.01 | .10  | -.01    |
| Motivating Potential Score | .14  | .11  | .15     |
| Means-efficacy             | .34  | .11  | .33**   |

Note:  $R^2 = .03$  for Step 1;  $\Delta R^2 = .08$  for Step 2;  $\Delta R^2 = .08$  for Step 3.  
 N=107. \*\* $p < .01$ ; \* $p < .05$



APPENDIX N

TABLE 4 SUMMARY OF HIERARCHICAL  
REGRESSION ANALYSIS FOR VARIABLES  
PREDICTING TURNOVER INTENTIONS

**Table 4: Summary of hierarchical regression analysis for variables predicting turnover intentions**

| Independent Variables      | B    | SE_B | $\beta$ |
|----------------------------|------|------|---------|
| <b>Step 1</b>              |      |      |         |
| Self-efficacy              | .08  | .10  | .08     |
| <b>Step 2</b>              |      |      |         |
| Self-efficacy              | .16  | .11  | .16     |
| Motivating Potential Score | -.16 | .11  | -.26    |
| <b>Step 3</b>              |      |      |         |
| Self-efficacy              | .17  | .11  | .17     |
| Motivating Potential Score | -.01 | .12  | -.01    |
| Means-efficacy             | -.30 | .13  | -.27*   |

Note:  $R^2 = .01$  for Step 1;  $\Delta R^2 = .02$  for Step 2;  $\Delta R^2 = .05$  for Step 3.  
N=107. \* $p < .05$

APPENDIX O

TABLE 5 MEANS, STANDARD DEVIATIONS,  
AND CORELATIONS FOR MEANS-EFFICACY  
SUBSCALES

Table 5. Means, Standard Deviation, Correlations for Means-Efficacy Subscales.

| Variables                   | Mean | SD   | 1      | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12 |
|-----------------------------|------|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 1. Turnover                 | 4.18 | 1.98 |        |       |       |       |       |       |       |       |       |       |       |    |
| 2. OCQ                      | 4.02 | .74  | -.47** |       |       |       |       |       |       |       |       |       |       |    |
| 3. MSQ                      | 3.42 | .74  | -.29** | .48** |       |       |       |       |       |       |       |       |       |    |
| 4. Information              | 3.69 | .63  | -.12   | .18   | .36** |       |       |       |       |       |       |       |       |    |
| 5. Supervisor<br>Support    | 4.09 | 1.14 | -.07   | .18   | .34** | .24*  |       |       |       |       |       |       |       |    |
| 6. Time                     | 4.21 | .91  | -.05   | .35** | .50** | .26*  | .36** |       |       |       |       |       |       |    |
| 7. Social<br>Support        | 4.52 | 1.00 | -.22*  | .35** | .39** | .03   | .33** | .17   |       |       |       |       |       |    |
| 8. Tools                    | 3.82 | 1.00 | -.27** | .26** | .41** | .21*  | .48** | .29** | .22*  |       |       |       |       |    |
| 9. Team                     | 4.31 | 1.08 | -.19*  | .30** | .45** | .17   | .35** | .32** | .62** | .39** |       |       |       |    |
| 10. Training                | 3.69 | 1.07 | -.11   | .26** | .39** | .11   | .43** | .29** | .48** | .55** | .47** |       |       |    |
| 11. Performance<br>Feedback | 3.78 | 1.04 | -.19   | .32** | .48** | .27*  | .64** | .34** | .29** | .60** | .42** | .59** |       |    |
| 12. GME                     | 4.01 | .67  | -.23   | .41** | .61** | .37** | .79** | .55** | .61** | .71** | .72** | .71** | .79** | -- |

N= 107, \*p .05 \*\*p .01

## APPENDIX P

TABLE 6 SUMMARY OF HIERARCHICAL  
REGRESSION ANALYSIS FOR VARIABLES  
PREDICTING JOB SATISFACTION WITH  
GROWTH NEED STRENGTH AND JOB  
DIAGNOSTIC SURVEY INTERACTION

**Table 6: Summary of hierarchical regression analysis for variables predicting job satisfaction with GNS and JDS interaction.**

| Independent Variables      | B    | SE_B | $\beta$ |
|----------------------------|------|------|---------|
| <b>Step 1</b>              |      |      |         |
| Self-efficacy              | .34  | .09  | .37**   |
| <b>Step 2</b>              |      |      |         |
| Self-efficacy              | .13  | .09  | .14     |
| Motivating Potential Score | .43  | .09  | .46**   |
| <b>Step 3</b>              |      |      |         |
| Self-efficacy              | .10  | .09  | .11     |
| Motivating Potential Score | .41  | .09  | .44**   |
| Growth Need Strength       | .10  | .09  | .11     |
| <b>Step 4</b>              |      |      |         |
| Self-efficacy              | .10  | .09  | .11     |
| Motivating Potential Score | .42  | .10  | .44**   |
| Growth Need Strength       | .10  | .09  | .11     |
| JDSxGNS Interaction        | <.01 | .08  | <.01    |
| <b>Step 5</b>              |      |      |         |
| Self-efficacy              | .09  | .08  | .09     |
| Motivating Potential Score | .16  | .10  | .17     |
| Growth Need Strength       | .12  | .08  | .12     |
| JDSxGNS Interaction        | .01  | .07  | .01     |
| Means-Efficacy             | .52  | .09  | .50**   |

Note:  $R^2 = .14$  for Step 1;  $\Delta R^2 = .16$  for Step 2;  $\Delta R^2 = .01$  for Step 3;  $\Delta R^2 = <.01$  for Step 4;  $\Delta R^2 = .17$  for Step 5.. N=107. \*\*p<.01, \*p<.05

APPENDIX Q

TABLE 7 SUMMARY OF HIERARCHICAL  
REGRESSION ANALYSIS FOR VARIABLES  
PREDICTING ORGANIZATIONAL  
COMMITMENT WITH GROWTH NEED  
STRENGTH AND JOB DIAGNOSTIC  
SURVEY INTERACTION

**Table 7 Summary of hierarchical regression analysis for variables predicting organizational commitment with GNS and JDS interaction**

| Independent Variables      | B    | SE_B | $\beta$ |
|----------------------------|------|------|---------|
| <b>Step 1</b>              |      |      |         |
| Self-efficacy              | .15  | .09  | .16     |
| <b>Step 2</b>              |      |      |         |
| Self-efficacy              | -.01 | .10  | -.01    |
| Motivating Potential Score | .31  | .10  | .34**   |
| <b>Step 3</b>              |      |      |         |
| Self-efficacy              | .01  | .10  | .09     |
| Motivating Potential Score | .32  | .10  | .34**   |
| Growth Need Strength       | -.06 | .10  | -.06    |
| <b>Step 4</b>              |      |      |         |
| Self-efficacy              | <.01 | .11  | <.01    |
| Motivating Potential Score | .33  | .11  | .36**   |
| Growth Need Strength       | -.06 | .10  | -.07    |
| JDSxGNS Interaction        | -.04 | .09  | -.04    |
| <b>Step 5</b>              |      |      |         |
| Self-efficacy              | -.01 | .10  | -.01    |
| Motivating Potential Score | .16  | .12  | .18     |
| Growth Need Strength       | -.05 | .09  | -.06    |
| JDSxGNS Interaction        | -.03 | .08  | -.03    |
| Means-Efficacy             | .34  | .11  | .33**   |

Note:  $R^2 = .03$  for Step 1;  $\Delta R^2 = .08$  for Step 2;  $\Delta R^2 = <.01$  for Step 3;  $\Delta R^2 = <.01$  for Step 4;  $\Delta R^2 = .07$  for Step 5.. N=107. \*\*p<.01, \*p<.05



APPENDIX R

TABLE 8 SUMMARY OF HIERARCHICAL  
REGRESSION ANALYSIS FOR VARIABLES  
PREDICTING TURNOVER INTENTIONS  
WITH GROWTH NEED STRENGTH AND  
JOB DIAGNOSTIC SURVEY  
INTERACTION

**Table 8: Summary of hierarchical regression analysis for variables predicting turnover intentions with GNS and JDS interaction.**

| Independent Variables      | B    | SE_B | $\beta$ |
|----------------------------|------|------|---------|
| <b>Step 1</b>              |      |      |         |
| Self-efficacy              | .08  | .10  | .08     |
| <b>Step 2</b>              |      |      |         |
| Self-efficacy              | .16  | .11  | .16     |
| Motivating Potential Score | -.16 | .11  | -.16    |
| <b>Step 3</b>              |      |      |         |
| Self-efficacy              | .15  | .11  | .16     |
| Motivating Potential Score | -.17 | .11  | -.17    |
| Growth Need Strength       | .04  | .11  | .04     |
| <b>Step 4</b>              |      |      |         |
| Self-efficacy              | .13  | .12  | .13     |
| Motivating Potential Score | -.14 | .12  | -.14    |
| Growth Need Strength       | .02  | .11  | .02     |
| JDSxGNS Interaction        | -.08 | .10  | -.09    |
| <b>Step 5</b>              |      |      |         |
| Self-efficacy              | .14  | .11  | .14     |
| Motivating Potential Score | .01  | .13  | .01     |
| Growth Need Strength       | .01  | .11  | .01     |
| JDSxGNS Interaction        | -.09 | .09  | -.09    |
| Means-Efficacy             | -.30 | .13  | -.28*   |

Note:  $R^2 = .01$  for Step 1;  $\Delta R^2 = .02$  for Step 2;  $\Delta R^2 = <.01$  for Step 3;  $\Delta R^2 = .01$  for Step 4;  $\Delta R^2 = .05$  for Step 5.. N=107. \* $p < .05$

## APPENDIX S

TABLE 9 MEAN DIFFERENCES IN STUDY  
VARIABLES FOR GENDER AND JOB TENURE

Table 9: Mean differences in study variables for gender and job tenure.

| Variable   | Gender |      |        |      | Job Tenure |      |        |      |
|------------|--------|------|--------|------|------------|------|--------|------|
|            | Male   |      | Female |      | 0-1 year   |      | > 1 yr |      |
|            | M      | S    | M      | S    | M          | S    | M      | S    |
| 1 Turnover | 3.38** | 2.02 | 4.58   | 1.87 | 4.12       | 2.02 | 4.45   | 1.98 |
| 2 OCQ      | 4.32*  | .73  | 3.86   | .78  | 3.95       | .81  | 4.06   | .77  |
| 3 MSQ      | 3.49   | .79  | 3.34   | .79  | 3.34       | .92  | 3.48   | .91  |
| 4 GME      | 4.00   | .66  | 3.96   | .76  | 3.93       | .71  | 4.08   | .84  |
| 5 JDS      | 4.38   | .84  | 4.64   | .85  | 4.54       | .82  | 4.59   | 1.02 |
| 7 NGSE     | 3.92   | .99  | 4.07   | 1.60 | 4.01       | 1.62 | 4.13   | 1.38 |

N= 107-108,  $F(1,107) > 8.044$ ,  $*p < .05$ ;  $F(1,107) = 10.164$ ,  $**p < .01$

APPENDIX T

TABLE 10 MEAN DIFFERENCES IN STUDY  
VARIABLES FOR TYPE OF INDUSTRY

**Table 10: Mean differences in study variables for type of disability**

| Variable   | Type of Industry |      |       |      |         |     |            |      |       |      |
|------------|------------------|------|-------|------|---------|-----|------------|------|-------|------|
|            | Private          |      | State |      | Federal |     | Non-profit |      | Other |      |
|            | M                | S    | M     | S    | M       | S   | M          | S    | M     | S    |
| 1 Turnover | 4.4              | 1.98 | 4.03  | 2.13 | 3.83    | 4   | 4.4        | 1.52 | 3.22  | 2.5  |
| 2 OCQ      | 3.92             | .80  | 3.92  | .43  | 4.56    | .15 | 4.07       | .83  | 4.09  | 1.35 |
| 3 MSQ      | 3.35             | .81  | 3.44  | .59  | 3.88    | .00 | 3.24       | .87  | 3.5   | .98  |
| 4 GME      | 3.96             | .68  | 3.87  | .59  | 4.88    | .71 | 3.98       | .85  | 4.19  | .99  |
| 5 JDS      | 4.46             | .84  | 4.63  | .90  | 5.26    | .71 | 4.57       | .81  | 4     | 1.11 |
| 7 NGSE     | 4.09             | .91  | 4.03  | .79  | 4.94    | .09 | 3.71       | 1.01 | 4.7   | 1.1  |

N= 107-108,  $F(1,107) > 8.044$ ,  $*p < .05$ ;  $F(1,107) = 10.164$ ,  $**p < .01$

APPENDIX U

TABLE 11 MEAN DIFFERENCES IN STUDY  
VARIABLES FOR TYPE OF DISABILITY

**Table 11: Mean differences of study variables for type of disability**

| Variable          | Type of Disability |      |          |      |          |      |          |      |               |      |       |     |
|-------------------|--------------------|------|----------|------|----------|------|----------|------|---------------|------|-------|-----|
|                   | Visual             |      | Learning |      | Deaf/HOH |      | Mobility |      | Communication |      | Other |     |
|                   | M                  | S    | M        | S    | M        | S    | M        | S    | M             | S    | M     | S   |
| <b>1</b> Turnover | 4.48               | 2.12 | 4.62     | 1.66 | 4.13     | 2.39 | 4.26     | 1.95 | 4.04          | 1.59 | 3.64  | 2.6 |
| <b>2</b> OCQ      | 4.11               | .84  | 3.91     | .92  | 3.71     | .64  | 3.92     | .78  | 3.89          | .70  | 3.99  | .67 |
| <b>3</b> MSQ      | 3.33               | .97  | 3.37     | .66  | 3.15     | .35  | 3.34     | .79  | 3.64          | .81  | 3.37  | .85 |
| <b>4</b> GME      | 3.86               | .85  | 3.97     | .76  | 4.13     | .54  | 3.98     | .71  | 3.96          | .58  | 4.03  | .86 |
| <b>5</b> JDS      | 4.60               | .91  | 4.59     | .68  | 4.14     | .70  | 4.66     | .99  | 4.29          | 1.05 | 4.39  | .75 |
| <b>6</b> NGSE     | 4.03               | .80  | 3.98     | .99  | 3.75     | .83  | 4.14     | .92  | 3.65          | 1.21 | 4.16  | .88 |

N= 106, \*p<.05



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